ELSEVIER

Surface Science 335 (1995) 435–440

surface science

Subject index

THEORETICAL METHODS, MODELS AND TECHNIQUES

Computer simulations

J. Böcker, R.R. Nazmutdinov, E. Spohr and K. Heinzinger, Molecular dynamics simulation studies of the mercury–water interface 335 (1995) 372

P.A. Rikvold, M. Gamboa-Aldeco, J. Zhang, M. Han, Q. Wang, H.L. Richards and A. Wieckowski, Computational lattice-gas modeling of the electrosorption of small molecules and ions 335 (1995) 389

X. Xia, L. Perera, U. Essmann and M.L. Berkowitz, The structure of water at platinum/water interfaces. Molecular dynamics computer simulations 335 (1995) 401

W. Schmickler, Tunneling of electrons through thin layers of water 335 (1995) 416

M.R. Philpott, J.N. Glosli and S.-B. Zhu, Molecular dynamics simulation of adsorption in electric double layers 335 (1995) 422

Construction and use of effective interatomic interactions

P.A. Rikvold, M. Gamboa-Aldeco, J. Zhang, M. Han, Q. Wang, H.L. Richards and A. Wieckowski, Computational lattice-gas modeling of the electrosorption of small molecules and ions 335 (1995) 389

Density functional calculations

E. Leiva, Electronic properties of a monolayer of thallium deposited on Ag(111) 335 (1995) 83

Equilibrium thermodynamics and statistical mechanics

P.A. Rikvold, M. Gamboa-Aldeco, J. Zhang, M. Han, Q. Wang, H.L. Richards and A. Wieckowski, Computational lattice-gas modeling of the electrosorption of small molecules and ions 335 (1995) 389

M.R. Philpott, J.N. Glosli and S.-B. Zhu, Molecular dynamics simulation of adsorption in electric double layers 335 (1995) 422

Jellium models

W. Schmickler, Tunneling of electrons through thin layers of water 335 (1995) 416

Models of surface chemical reactions

V. Lazarescu, Adsorption of pyrazine on Au(111) and Ag(111): on the role of the electronic factor 335 (1995) 227

Molecular dynamics

J. Böcker, R.R. Nazmutdinov, E. Spohr and K. Heinzinger, Molecular dynamics simulation studies of the mercury–water interface 335 (1995) 372

X. Xia, L. Perera, U. Essmann and M.L. Berkowitz, The structure of water at platinum/water interfaces. Molecular dynamics computer simulations 335 (1995) 401

M.R. Philpott, J.N. Glosli and S.-B. Zhu, Molecular dynamics simulation of adsorption in electric double layers 335 (1995) 422

EXPERIMENTAL SAMPLE PREPARATION AND CHARACTERIZATION METHODS

Adsorption isotherms

S. Trasatti, Surface science and electrochemistry: concepts and problems 335 (1995) 1

W.J. Lorenz and G. Staikov, 2D and 3D thin film formation and growth mechanisms in metal electrocrystallization – an atomistic view by in situ STM 335 (1995) 32

M.L. Foresti, G. Aloisi, M. Innocenti, H. Kobayashi and R. Guidelli, Crystal face effects on adsorption of ionic and non-ionic species on Ag electrodes: an electrochemical and STM study 335 (1995) 241

Atomic force microscopy

W.J. Lorenz and G. Staikov, 2D and 3D thin film formation and growth mechanisms in metal electrocrystallization – an atomistic view by in situ STM 335 (1995) 32

R.J. Nichols, E. Bunge, H. Meyer and H. Baumgärtel, Classification of growth behaviour for copper on various substrates with in-situ scanning probe microscopy 335 (1995) 110

Auger electron spectroscopy

P. Mrozek, Y.-E. Sung and A. Wieckowski, Silver deposition on the Au(111) electrode without interference by specifically adsorbed anions 335 (1995) 44

N.M. Marković, H.A. Gasteiger, C.A. Lucas, I.M. Tidswell and P.N. Ross, Jr., The effect of chloride on the underpotential

deposition of copper on Pt(111): AES, LEED, RRDE, and X-ray scattering studies 335 (1995) 91
V. Lazarescu, Adsorption of pyrazine on Au(111) and Ag(111): on the role of the electronic factor 335 (1995) 227

Electrical transport measurements

M. Šmith, V. Gotovac, Lj. Aljinović and M. Lučić-Lavčević, An investigation of the electrochemical and photoelectrochemical properties of the cuprous oxide/liquid phase boundary 335 (1995) 171

Electrochemical methods

S. Trasatti, Surface science and electrochemistry: concepts and problems 335 (1995) 1
P. Mrozek, Y.-E. Sung and A. Wieckowski, Silver deposition on the Au(111) electrode without interference by specifically adsorbed anions 335 (1995) 44
G.A. Attard, R. Price and A. Al-Akl, Electrochemical and ultra-high vacuum characterisation of rhodium on Pt(111): a temperature dependent growth mode 335 (1995) 52
G.A. Attard and R. Price, Electrochemical iunvestigation of a structure sensitive growth mode: palladium deposition on Pt(100)-hex-R0.7° and Pt(100)-(1 × 1) 335 (1995) 63
N.M. Marković, H.A. Gasteiger, C.A. Lucas, I.M. Tidswell and P.N. Ross, Jr., The effect of chloride on the underpotential deposition of copper on Pt(111): AES, LEED, RRDE, and X-ray scattering studies 335 (1995) 91
R. Gómez, H.S. Yee, G.M. Bommarito, J.M. Feliu and H.D. Abruña, Anion effects and the mechanism of Cu UPD on Pt(111): X-ray and electrochemical studies 335 (1995) 101
J.X. Wang, R.R. Adzic, O.M. Magnussen and B.M. Ocko, Structure of electrodeposited Tl overlayers on Au(100) studied via surface X-ray scattering 335 (1995) 120
M. Šmith, V. Gotovac, Lj. Aljinović and M. Lučić-Lavčević An investigation of the electrochemical and photoelectrochemical properties of the cuprous oxide/liquid phase boundary 335 (1995) 171
E.M. Stuve, A. Krasnopoler and D.E. Sauer, Relating the in-situ, ex-situ, and non-situ environments in surface electrochemistry 335 (1995) 177
V.M. Schmidt, J. Stumper, J. Schmidberger, E. Pastor and A. Hamelin, Structural effects on ethine adsorption at gold single-crystal electrodes 335 (1995) 197
T. Yamada, N. Batina and K. Itaya, Interfacial structure of iodine electrodeposited on Au(111): studies by LEED and in situ STM 335 (1995) 204
A. Tadjeddine, A. Peremans and P. Guyot-Sionnest, Vibrational spectroscopy of the electrochemical interface by visible-infrared sum-frequency generation 335 (1995) 210
C. Stuhlmann, Characterization of an electrode adlayer by in-situ infrared spectroscopy: cyanide on Pt(111) 335 (1995) 221
Y. Hori, H. Wakebe, T. Tsukamoto and O. Koga, Adsorption of CO accompanied with simultaneous charge transfer on copper single crystal electrodes related with electrochemical reduction of CO_2 to hydrocarbons 335 (1995) 258
S. Mirwald, B. Pettinger and J. Lipkowski, Sulfate adsorption at Au(111) electrodes: an optical second harmonic generation study 335 (1995) 264
M.P. Soriaga, J.A. Schimpf, A. Carrasquillo, Jr., J.B. Abreu, W. Temesghen, R.J. Barriga, J.-J. Jeng, K. Sashikata and K. Itaya, Electrochemistry of the I-on-Pd single-crystal interface: studies by UHV-EC and in situ STM 335 (1995) 273
M.H. Hölzle, Th. Wandlowski and D.M. Kolb, Structural transitions in uracil adlayers on gold single crystal electrodes 335 (1995) 281
A.M. Bittner, J. Wintterlin, B. Beran and G. Ertl, Bromine adsorption on Pt(111), (100), and (110) – an STM study in air and in electrolyte 335 (1995) 291
U. Müller, U. Schmiemann, A. Dülberg and H. Baltruschat, Adsorption and hydrogenation of simple alkenes at Pt-group metal electrodes studied by DEMS: influence of the crystal orientation 335 (1995) 333
F. Richarz, B. Wohlmann, U. Vogel, H. Hoffschulz and K. Wandelt, Surface and electrochemical characterization of electrodeposited PtRu alloys 335 (1995) 361
P.A. Rikvold, M. Gamboa-Aldeco, J. Zhang, M. Han, Q. Wang, H.L. Richards and A. Wieckowski, Computational lattice-gas modeling of the electrosorption of small molecules and ions 335 (1995) 389

Electron energy loss spectroscopy

P. Baumann, G. Pirug, D. Reuter and H.P. Bonzel, UHV adsorption studies of K/H_2O on Pt(111) and O/CH_3COOH on Cu(110): orientation and intermediates 335 (1995) 186

Electron–solid diffraction

Low energy electron diffraction (LEED)

P. Mrozek, Y.-E. Sung and A. Wieckowski, Silver deposition on the Au(111) electrode without interference by specifically adsorbed anions 335 (1995) 44
N.M. Marković, H.A. Gasteiger, C.A. Lucas, I.M. Tidswell and P.N. Ross, Jr., The effect of chloride on the underpotential deposition of copper on Pt(111): AES, LEED, RRDE, and X-ray scattering studies 335 (1995) 91
T. Yamada, N. Batina and K. Itaya, Interfacial structure of iodine electrodeposited on Au(111): studies by LEED and in situ STM 335 (1995) 204
M.P. Soriaga, J.A. Schimpf, A. Carrasquillo, Jr., J.B. Abreu, W. Temesghen, R.J. Barriga, J.-J. Jeng, K. Sashikata and K. Itaya, Electrochemistry of the I-on-Pd single-crystal interface: studies by UHV-EC and in situ STM 335 (1995) 273

Photoelectron diffraction

P. Baumann, G. Pirug, D. Reuter and H.P. Bonzel, UHV adsorption studies of K/H_2O on Pt(111) and O/CH_3COOH on Cu(110): orientation and intermediates 335 (1995) 186

Ellipsometry

T. Frelink, W. Visscher and J.A.R. van Veen, On the role of Ru and Sn as promotors of methanol electro-oxidation over Pt 335 (1995) 353

Ion scattering spectroscopy

Low energy ion scattering (LEIS)

F. Richarz, B. Wohlmann, U. Vogel, H. Hoffschulz and K. Wandelt, Surface and electrochemical characterization of electrodeposited PtRu alloys 335 (1995) 361

Non-linear optical methods

Second harmonic generation

E. Leiva, Electronic properties of a monolayer of thallium deposited on Ag(111) 335 (1995) 83

S. Mirwald, B. Pettinger and J. Lipkowski, Sulfate adsorption at Au(111) electrodes: an optical second harmonic generation study 335 (1995) 264

Sum frequency generation

A. Tadjeddine, A. Peremans and P. Guyot-Sionnest, Vibrational spectroscopy of the electrochemical interface by visible-infrared sum-frequency generation 335 (1995) 210

K.A. Friedrich, W. Daum, C. Klünker, D. Knabben, U. Stimming and H. Ibach, In-situ spectroscopy of cyanide vibrations on Pt(111) and Pt(110) electrode surfaces: potential dependencies and the influence of surface disorder 335 (1995) 315

Photoelectron spectroscopy

Soft X-ray photoelectron spectroscopy (using synchrotron radiation)

W. Jaegermann and Th. Mayer, What do we learn from model experiments of semiconductor/electrolyte interfaces in UHV: coadsorption of Br_2 with Na and H_2O on $WSe_2(0001)$ 335 (1995) 343

X-ray photoelectron spectroscopy

V. Lazarescu, Adsorption of pyrazine on Au(111) and Ag(111): on the role of the electronic factor 335 (1995) 227

F. Richarz, B. Wohlmann, U. Vogel, H. Hoffschulz and K. Wandelt, Surface and electrochemical characterization of electrodeposited PtRu alloys 335 (1995) 361

Photon absorption spectroscopy

J. Mink, J. Kristóf, A. De Battisti, S. Daolio and Cs. Németh, Investigation on the formation of RuO_2-based mixed oxide coatings by spectroscopic methods 335 (1995) 252

Extended X-ray absorption fine structure (EXAFS)

W.J. Lorenz and G. Staikov, 2D and 3D thin film formation and growth mechanisms in metal electrocrystallization – an atomistic view by in situ STM 335 (1995) 32

R. Gómez, H.S. Yee, G.M. Bommarito, J.M. Feliu and H.D. Abruña, Anion effects and the mechanism of Cu UPD on Pt(111): X-ray and electrochemical studies 335 (1995) 101

Infrared absorption spectroscopy

Y.-L. Mathis, K. Murakoshi, F. Bouamrane, P. Roy and A. Tadjeddine, Surface reconstruction of Au(100) electrodes monitored by far infrared spectroscopy 335 (1995) 155

C. Stuhlmann, Characterization of an electrode adlayer by in-situ infrared spectroscopy: cyanide on Pt(111) 335 (1995) 221

I. Villegas, N. Kizhakevariam and M.J. Weaver, Infrared spectroscopy of model electrochemical interfaces in ultrahigh vacuum: some implications for ionic and chemisorbate solvation at electrode surfaces 335 (1995) 300

Surface extended X-ray absorption fine structure (SEXAFS)

R. Gómez, H.S. Yee, G.M. Bommarito, J.M. Feliu and H.D. Abruña, Anion effects and the mechanism of Cu UPD on Pt(111): X-ray and electrochemical studies 335 (1995) 101

Reflection spectroscopy

Y. Shingaya, H. Matsumoto, H. Ogasawara and M. Ito, In situ and ex situ IRAS, LEED and EC-STM studies of underpotentially deposited copper on a Pt(111) electrode in sulfuric acid solution: coadsorption of sulfate ion with copper 335 (1995) 23

Scanning tunneling microscopy

Y. Shingaya, H. Matsumoto, H. Ogasawara and M. Ito, In situ and ex situ IRAS, LEED and EC-STM studies of underpotentially deposited copper on a Pt(111) electrode in sulfuric acid solution: coadsorption of sulfate ion with copper 335 (1995) 23

W.J. Lorenz and G. Staikov, 2D and 3D thin film formation and growth mechanisms in metal electrocrystallization – an atomistic view by in situ STM 335 (1995) 32

N. Shinotsuka, K. Sashikata and K. Itaya, In situ scanning tunneling microscopy of underpotential deposition of Ag on $Pt(111)(\sqrt{7} \times \sqrt{7})R19.1°$–I 335 (1995) 75

R.J. Nichols, E. Bunge, H. Meyer and H. Baumgärtel, Classification of growth behaviour for copper on various substrates with in-situ scanning probe microscopy 335 (1995) 110

J. Hotlos, O.M. Magnussen and R.J. Behm, Effect of trace amounts of Cl^- in Cu underpotential deposition on Au(111) in perchlorate solutions: an in-situ scanning tunneling microscopy study 335 (1995) 129

N. Breuer, A.M. Funtikov, U. Stimming and R. Vogel, In situ electrochemical STM imaging of roughened gold and platinum electrode surfaces 335 (1995) 145

H. Yao, S.-L. Yau and K. Itaya, Atomic resolution images of GaAs(111)A surfaces in sulfuric acid solutions 335 (1995) 166

T. Yamada, N. Batina and K. Itaya, Interfacial structure of iodine electrodeposited on Au(111): studies by LEED and in situ STM 335 (1995) 204

M.L. Foresti, G. Aloisi, M. Innocenti, H. Kobayashi and R. Guidelli, Crystal face effects on adsorption of ionic and nonionic species on Ag electrodes: an electrochemical and STM study 335 (1995) 241

M.P. Soriaga, J.A. Schimpf, A. Carrasquillo, Jr., J.B. Abreu, W. Temesghen, R.J. Barriga, J.-J. Jeng, K. Sashikata and K. Itaya, Electrochemistry of the I-on-Pd single-crystal interface: studies by UHV-EC and in situ STM 335 (1995) 273

A.M. Bittner, J. Wintterlin, B. Beran and G. Ertl, Bromine adsorption on Pt(111), (100), and (110) – an STM study in air and in electrolyte 335 (1995) 291
W. Schmickler, Tunneling of electrons through thin layers of water 335 (1995) 416

Work function measurements

S. Trasatti, Surface science and electrochemistry: concepts and problems 335 (1995) 1

X-ray scattering, diffraction, and reflection

N.M. Marković, H.A. Gasteiger, C.A. Lucas, I.M. Tidswell and P.N. Ross, Jr., The effect of chloride on the underpotential deposition of copper on Pt(111): AES, LEED, RRDE, and X-ray scattering studies 335 (1995) 91
J.X. Wang, R.R. Adzic, O.M. Magnussen and B.M. Ocko, Structure of electrodeposited Tl overlayers on Au(100) studied via surface X-ray scattering 335 (1995) 120
M.F. Toney, J.N. Howard, J. Richer, G.L. Borges, J.G. Gordon, O.R. Melroy, D.G. Wiesler, D. Yee and L.B. Sorensen, Distribution of water molecules at Ag(111)/electrolyte interface as studied with surface X-ray scattering 335 (1995) 326

PHENOMENA

Adsorption kinetics

W.J. Lorenz and G. Staikov, 2D and 3D thin film formation and growth mechanisms in metal electrocrystallization – an atomistic view by in situ STM 335 (1995) 32
N.M. Marković, H.A. Gasteiger, C.A. Lucas, I.M. Tidswell and P.N. Ross, Jr., The effect of chloride on the underpotential deposition of copper on Pt(111): AES, LEED, RRDE, and X-ray scattering studies 335 (1995) 91
M.H. Hölzle, Th. Wandlowski and D.M. Kolb, Structural transitions in uracil adlayers on gold single crystal electrodes 335 (1995) 281

Catalysis

F. Richarz, B. Wohlmann, U. Vogel, H. Hoffschulz and K. Wandelt, Surface and electrochemical characterization of electrodeposited PtRu alloys 335 (1995) 361

Chemisorption

S. Trasatti, Surface science and electrochemistry: concepts and problems 335 (1995) 1
N.M. Marković, H.A. Gasteiger, C.A. Lucas, I.M. Tidswell and P.N. Ross, Jr., The effect of chloride on the underpotential deposition of copper on Pt(111): AES, LEED, RRDE, and X-ray scattering studies 335 (1995) 91
P. Baumann, G. Pirug, D. Reuter and H.P. Bonzel, UHV adsorption studies of K/H_2O on Pt(111) and O/CH_3COOH on Cu(110): orientation and intermediates 335 (1995) 186
V. Lazarescu, Adsorption of pyrazine on Au(111) and Ag(111): on the role of the electronic factor 335 (1995) 227
M.L. Foresti, G. Aloisi, M. Innocenti, H. Kobayashi and R. Guidelli, Crystal face effects on adsorption of ionic and non-ionic species on Ag electrodes: an electrochemical and STM study 335 (1995) 241
S. Mirwald, B. Pettinger and J. Lipkowski, Sulfate adsorption at Au(111) electrodes: an optical second harmonic generation study 335 (1995) 264
A.M. Bittner, J. Wintterlin, B. Beran and G. Ertl, Bromine adsorption on Pt(111), (100), and (110) – an STM study in air and in electrolyte 335 (1995) 291
U. Müller, U. Schmiemann, A. Dülberg and H. Baltruschat, Adsorption and hydrogenation of simple alkenes at Pt-group metal electrodes studied by DEMS: influence of the crystal orientation 335 (1995) 333
P.A. Rikvold, M. Gamboa-Aldeco, J. Zhang, M. Han, Q. Wang, H.L. Richards and A. Wieckowski, Computational lattice-gas modeling of the electrosorption of small molecules and ions 335 (1995) 389

Crystallization

W.J. Lorenz and G. Staikov, 2D and 3D thin film formation and growth mechanisms in metal electrocrystallization – an atomistic view by in situ STM 335 (1995) 32
X. Xia, L. Perera, U. Essmann and M.L. Berkowitz, The structure of water at platinum/water interfaces. Molecular dynamics computer simulations 335 (1995) 401

Epitaxy

W.J. Lorenz and G. Staikov, 2D and 3D thin film formation and growth mechanisms in metal electrocrystallization – an atomistic view by in situ STM 335 (1995) 32
J.X. Wang, R.R. Adzic, O.M. Magnussen and B.M. Ocko, Structure of electrodeposited Tl overlayers on Au(100) studied via surface X-ray scattering 335 (1995) 120

Growth

W.J. Lorenz and G. Staikov, 2D and 3D thin film formation and growth mechanisms in metal electrocrystallization – an atomistic view by in situ STM 335 (1995) 32
R.J. Nichols, E. Bunge, H. Meyer and H. Baumgärtel, Classification of growth behaviour for copper on various substrates with in-situ scanning probe microscopy 335 (1995) 110

Ion–solid interactions

E.M. Stuve, A. Krasnopoler and D.E. Sauer, Relating the in-situ, ex-situ, and non-situ environments in surface electrochemistry 335 (1995) 177

Nucleation

W.J. Lorenz and G. Staikov, 2D and 3D thin film formation and growth mechanisms in metal electrocrystallization – an atomistic view by in situ STM 335 (1995) 32
R.J. Nichols, E. Bunge, H. Meyer and H. Baumgärtel, Classification of growth behaviour for copper on various substrates with in-situ scanning probe microscopy 335 (1995) 110

Oxidation

F. Richarz, B. Wohlmann, U. Vogel, H. Hoffschulz and K. Wandelt, Surface and electrochemical characterization of electrodeposited PtRu alloys 335 (1995) 361

Physical adsorption

S. Trasatti, Surface science and electrochemistry: concepts and problems 335 (1995) 1

P. Baumann, G. Pirug, D. Reuter and H.P. Bonzel, UHV adsorption studies of K/H_2O on Pt(111) and O/CH_3COOH on Cu(110): orientation and intermediates 335 (1995) 186

M.R. Philpott, J.N. Glosli and S.-B. Zhu, Molecular dynamics simulation of adsorption in electric double layers 335 (1995) 422

Second harmonic generation

S. Mirwald, B. Pettinger and J. Lipkowski, Sulfate adsorption at Au(111) electrodes: an optical second harmonic generation study 335 (1995) 264

Surface chemical reaction

N. Shinotsuka, K. Sashikata and K. Itaya, In situ scanning tunneling microscopy of underpotential deposition of Ag on Pt(111)($\sqrt{7} \times \sqrt{7}$)R19.1°–I 335 (1995) 75

H. Yao, S.-L. Yau and K. Itaya, Atomic resolution images of GaAs(111)A surfaces in sulfuric acid solutions 335 (1995) 166

Y. Hori, H. Wakebe, T. Tsukamoto and O. Koga, Adsorption of CO accompanied with simultaneous charge transfer on copper single crystal electrodes related with electrochemical reduction of CO_2 to hydrocarbons 335 (1995) 258

U. Müller, U. Schmiemann, A. Dülberg and H. Baltruschat, Adsorption and hydrogenation of simple alkenes at Pt-group metal electrodes studied by DEMS: influence of the crystal orientation 335 (1995) 333

Surface electronic phenomena (work function, surface potential, surface states, etc.)

S. Trasatti, Surface science and electrochemistry: concepts and problems 335 (1995) 1

E. Leiva, Electronic properties of a monolayer of thallium deposited on Ag(111) 335 (1995) 83

E.M. Stuve, A. Krasnopoler and D.E. Sauer, Relating the in-situ, ex-situ, and non-situ environments in surface electrochemistry 335 (1995) 177

W. Jaegermann and Th. Mayer, What do we learn from model experiments of semiconductor/electrolyte interfaces in UHV: coadsorption of Br_2 with Na and H_2O on WSe_2(0001) 335 (1995) 343

J. Böcker, R.R. Nazmutdinov, E. Spohr and K. Heinzinger, Molecular dynamics simulation studies of the mercury–water interface 335 (1995) 372

Surface photovoltage

M. Šmith, V. Gotovac, Lj. Aljinović and M. Lučić-Lavčević An investigation of the electrochemical and photoelectrochemical properties of the cuprous oxide/liquid phase boundary 335 (1995) 171

Surface relaxation and reconstruction

Y.-L. Mathis, K. Murakoshi, F. Bouamrane, P. Roy and A. Tadjeddine, Surface reconstruction of Au(100) electrodes monitored by far infrared spectroscopy 335 (1995) 155

S. Mirwald, B. Pettinger and J. Lipkowski, Sulfate adsorption at Au(111) electrodes: an optical second harmonic generation study 335 (1995) 264

Surface roughening

A.J. Arvia and R.C. Salvarezza, From regular to irregular solid electrode surfaces: a systematic approach to their characterization 335 (1995) 378

Surface segregation

J. Mink, J. Kristóf, A. De Battisti, S. Daolio and Cs. Németh, Investigation on the formation of RuO_2-based mixed oxide coatings by spectroscopic methods 335 (1995) 252

Surface structure, morphology, roughness, and topography

G.A. Attard, R. Price and A. Al-Akl, Electrochemical and ultrahigh vacuum characterisation of rhodium on Pt(111): a temperature dependent growth mode 335 (1995) 52

G.A. Attard and R. Price, Electrochemical iunvestigation of a structure sensitive growth mode: palladium deposition on Pt(100)-hex-R0.7° and Pt(100)-(1 × 1) 335 (1995) 63

N.M. Marković, H.A. Gasteiger, C.A. Lucas, I.M. Tidswell and P.N. Ross, Jr., The effect of chloride on the underpotential deposition of copper on Pt(111): AES, LEED, RRDE, and X-ray scattering studies 335 (1995) 91

J.X. Wang, R.R. Adzic, O.M. Magnussen and B.M. Ocko, Structure of electrodeposited Tl overlayers on Au(100) studied via surface X-ray scattering 335 (1995) 120

J. Hotlos, O.M. Magnussen and R.J. Behm, Effect of trace amounts of Cl^- in Cu underpotential deposition on Au(111) in perchlorate solutions: an in-situ scanning tunneling microscopy study 335 (1995) 129

J. Rappich, M. Aggour, S. Rauscher, H.J. Lewerenz and H. Jungblut, Electrochemical surface conditioning of n-Si(111) 335 (1995) 160

H. Yao, S.-L. Yau and K. Itaya, Atomic resolution images of GaAs(111)A surfaces in sulfuric acid solutions 335 (1995) 166

C. Stuhlmann, Characterization of an electrode adlayer by in-situ infrared spectroscopy: cyanide on Pt(111) 335 (1995) 221

A.M. Bittner, J. Wintterlin, B. Beran and G. Ertl, Bromine adsorption on Pt(111), (100), and (110) – an STM study in air and in electrolyte 335 (1995) 291

M.F. Toney, J.N. Howard, J. Richer, G.L. Borges, J.G. Gordon, O.R. Melroy, D.G. Wiesler, D. Yee and L.B. Sorensen, Distribution of water molecules at Ag(111)/electrolyte interface as studied with surface X-ray scattering 335 (1995) 326

J. Böcker, R.R. Nazmutdinov, E. Spohr and K. Heinzinger, Molecular dynamics simulation studies of the mercury–water interface 335 (1995) 372

A.J. Arvia and R.C. Salvarezza, From regular to irregular solid electrode surfaces: a systematic approach to their characterization 335 (1995) 378

Surface thermodynamics (including phase transitions)

N.M. Marković, H.A. Gasteiger, C.A. Lucas, I.M. Tidswell and P.N. Ross, Jr., The effect of chloride on the underpotential deposition of copper on Pt(111): AES, LEED, RRDE, and X-ray scattering studies 335 (1995) 91

M.H. Hölzle, Th. Wandlowski and D.M. Kolb, Structural transitions in uracil adlayers on gold single crystal electrodes 335 (1995) 281

P.A. Rikvold, M. Gamboa-Aldeco, J. Zhang, M. Han, Q. Wang, H.L. Richards and A. Wieckowski, Computational lattice-gas modeling of the electrosorption of small molecules and ions 335 (1995) 389

X. Xia, L. Perera, U. Essmann and M.L. Berkowitz, The structure of water at platinum/water interfaces. Molecular dynamics computer simulations 335 (1995) 401

Tunneling

H. Yao, S.-L. Yau and K. Itaya, Atomic resolution images of GaAs(111)A surfaces in sulfuric acid solutions 335 (1995) 166

W. Schmickler, Tunneling of electrons through thin layers of water 335 (1995) 416

Vibrations of adsorbed molecules

Y. Shingaya, H. Matsumoto, H. Ogasawara and M. Ito, In situ and ex situ IRAS, LEED and EC-STM studies of underpotentially deposited copper on a Pt(111) electrode in sulfuric acid solution: coadsorption of sulfate ion with copper 335 (1995) 23

C. Stuhlmann, Characterization of an electrode adlayer by in-situ infrared spectroscopy: cyanide on Pt(111) 335 (1995) 221

K.A. Friedrich, W. Daum, C. Klünker, D. Knabben, U. Stimming and H. Ibach, In-situ spectroscopy of cyanide vibrations on Pt(111) and Pt(110) electrode surfaces: potential dependencies and the influence of surface disorder 335 (1995) 315

ELSEVIER

Surface Science 335 (1995) 441–447

surface science

Materials index

ELEMENTAL AND CHEMICAL IDENTITY

Elements

Alkali metals

I. Villegas, N. Kizhakevariam and M.J. Weaver, Infrared spectroscopy of model electrochemical interfaces in ultrahigh vacuum: some implications for ionic and chemisorbate solvation at electrode surfaces 335 (1995) 300

Bromine

N.M. Marković, H.A. Gasteiger, C.A. Lucas, I.M. Tidswell and P.N. Ross, Jr., The effect of chloride on the underpotential deposition of copper on Pt(111): AES, LEED, RRDE, and X-ray scattering studies 335 (1995) 91

A.M. Bittner, J. Wintterlin, B. Beran and G. Ertl, Bromine adsorption on Pt(111), (100), and (110) – an STM study in air and in electrolyte 335 (1995) 291

Carbon

K. Videm, The influence of the state of the surface on the electrochemistry of iron and carbon steel electrodes in aqueous CO_2 solutions 335 (1995) 235

Chalcogens

M.P. Soriaga, J.A. Schimpf, A. Carrasquillo, Jr., J.B. Abreu, W. Temesghen, R.J. Barriga, J.-J. Jeng, K. Sashikata and K. Itaya, Electrochemistry of the I-on-Pd single-crystal interface: studies by UHV-EC and in situ STM 335 (1995) 273

Chlorine

N.M. Marković, H.A. Gasteiger, C.A. Lucas, I.M. Tidswell and P.N. Ross, Jr., The effect of chloride on the underpotential deposition of copper on Pt(111): AES, LEED, RRDE, and X-ray scattering studies 335 (1995) 91

J. Hotlos, O.M. Magnussen and R.J. Behm, Effect of trace amounts of Cl^- in Cu underpotential deposition on Au(111) in perchlorate solutions: an in-situ scanning tunneling microscopy study 335 (1995) 129

Y.-L. Mathis, K. Murakoshi, F. Bouamrane, P. Roy and A. Tadjeddine, Surface reconstruction of Au(100) electrodes monitored by far infrared spectroscopy 335 (1995) 155

Copper

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R.J. Nichols, E. Bunge, H. Meyer and H. Baumgärtel, Classification of growth behaviour for copper on various substrates with in-situ scanning probe microscopy 335 (1995) 110

J. Hotlos, O.M. Magnussen and R.J. Behm, Effect of trace amounts of Cl^- in Cu underpotential deposition on Au(111) in perchlorate solutions: an in-situ scanning tunneling microscopy study 335 (1995) 129

Y. Hori, H. Wakebe, T. Tsukamoto and O. Koga, Adsorption of CO accompanied with simultaneous charge transfer on copper single crystal electrodes related with electrochemical reduction of CO_2 to hydrocarbons 335 (1995) 258

Gold

P. Mrozek, Y.-E. Sung and A. Wieckowski, Silver deposition on the Au(111) electrode without interference by specifically adsorbed anions 335 (1995) 44

R.J. Nichols, E. Bunge, H. Meyer and H. Baumgärtel, Classification of growth behaviour for copper on various substrates with in-situ scanning probe microscopy 335 (1995) 110

N. Breuer, A.M. Funtikov, U. Stimming and R. Vogel, In situ electrochemical STM imaging of roughened gold and platinum electrode surfaces 335 (1995) 145

Y.-L. Mathis, K. Murakoshi, F. Bouamrane, P. Roy and A. Tadjeddine, Surface reconstruction of Au(100) electrodes monitored by far infrared spectroscopy 335 (1995) 155

V.M. Schmidt, J. Stumper, J. Schmidberger, E. Pastor and A. Hamelin, Structural effects on ethine adsorption at gold single-crystal electrodes 335 (1995) 197

T. Yamada, N. Batina and K. Itaya, Interfacial structure of iodine electrodeposited on Au(111): studies by LEED and in situ STM 335 (1995) 204

V. Lazarescu, Adsorption of pyrazine on Au(111) and Ag(111): on the role of the electronic factor 335 (1995) 227

S. Mirwald, B. Pettinger and J. Lipkowski, Sulfate adsorption at Au(111) electrodes: an optical second harmonic generation study 335 (1995) 264

M.H. Hölzle, Th. Wandlowski and D.M. Kolb, Structural transitions in uracil adlayers on gold single crystal electrodes 335 (1995) 281

Iodine

N. Shinotsuka, K. Sashikata and K. Itaya, In situ scanning tunneling microscopy of underpotential deposition of Ag on Pt(111)($\sqrt{7} \times \sqrt{7}$)R19.1°–I 335 (1995) 75

T. Yamada, N. Batina and K. Itaya, Interfacial structure of iodine electrodeposited on Au(111): studies by LEED and in situ STM 335 (1995) 204

Iron

K. Videm, The influence of the state of the surface on the electrochemistry of iron and carbon steel electrodes in aqueous CO_2 solutions 335 (1995) 235

Mercury

J. Böcker, R.R. Nazmutdinov, E. Spohr and K. Heinzinger, Molecular dynamics simulation studies of the mercury–water interface 335 (1995) 372

Palladium

G.A. Attard and R. Price, Electrochemical iunvestigation of a structure sensitive growth mode: palladium deposition on Pt(100)-hex-R0.7° and Pt(100)-(1 × 1) 335 (1995) 63

M.P. Soriaga, J.A. Schimpf, A. Carrasquillo, Jr., J.B. Abreu, W. Temesghen, R.J. Barriga, J.-J. Jeng, K. Sashikata and K. Itaya, Electrochemistry of the I-on-Pd single-crystal interface: studies by UHV-EC and in situ STM 335 (1995) 273

U. Müller, U. Schmiemann, A. Dülberg and H. Baltruschat, Adsorption and hydrogenation of simple alkenes at Pt-group metal electrodes studied by DEMS: influence of the crystal orientation 335 (1995) 333

Platinum

G.A. Attard, R. Price and A. Al-Akl, Electrochemical and ultrahigh vacuum characterisation of rhodium on Pt(111): a temperature dependent growth mode 335 (1995) 52

G.A. Attard and R. Price, Electrochemical iunvestigation of a structure sensitive growth mode: palladium deposition on Pt(100)-hex-R0.7° and Pt(100)-(1 × 1) 335 (1995) 63

N. Shinotsuka, K. Sashikata and K. Itaya, In situ scanning tunneling microscopy of underpotential deposition of Ag on Pt(111)($\sqrt{7} \times \sqrt{7}$)R19.1°–I 335 (1995) 75

N.M. Marković, H.A. Gasteiger, C.A. Lucas, I.M. Tidswell and P.N. Ross, Jr., The effect of chloride on the underpotential deposition of copper on Pt(111): AES, LEED, RRDE, and X-ray scattering studies 335 (1995) 91

R. Gómez, H.S. Yee, G.M. Bommarito, J.M. Feliu and H.D. Abruña, Anion effects and the mechanism of Cu UPD on Pt(111): X-ray and electrochemical studies 335 (1995) 101

N. Breuer, A.M. Funtikov, U. Stimming and R. Vogel, In situ electrochemical STM imaging of roughened gold and platinum electrode surfaces 335 (1995) 145

E.M. Stuve, A. Krasnopoler and D.E. Sauer, Relating the in-situ, ex-situ, and non-situ environments in surface electrochemistry 335 (1995) 177

A. Tadjeddine, A. Peremans and P. Guyot-Sionnest, Vibrational spectroscopy of the electrochemical interface by visible-infrared sum-frequency generation 335 (1995) 210

C. Stuhlmann, Characterization of an electrode adlayer by in-situ infrared spectroscopy: cyanide on Pt(111) 335 (1995) 221

A.M. Bittner, J. Wintterlin, B. Beran and G. Ertl, Bromine adsorption on Pt(111), (100), and (110) – an STM study in air and in electrolyte 335 (1995) 291

I. Villegas, N. Kizhakevariam and M.J. Weaver, Infrared spectroscopy of model electrochemical interfaces in ultrahigh vacuum: some implications for ionic and chemisorbate solvation at electrode surfaces 335 (1995) 300

K.A. Friedrich, W. Daum, C. Klünker, D. Knabben, U. Stimming and H. Ibach, In-situ spectroscopy of cyanide vibrations on Pt(111) and Pt(110) electrode surfaces: potential dependencies and the influence of surface disorder 335 (1995) 315

U. Müller, U. Schmiemann, A. Dülberg and H. Baltruschat, Adsorption and hydrogenation of simple alkenes at Pt-group metal electrodes studied by DEMS: influence of the crystal orientation 335 (1995) 333

T. Frelink, W. Visscher and J.A.R. van Veen, On the role of Ru and Sn as promotors of methanol electro-oxidation over Pt 335 (1995) 353

F. Richarz, B. Wohlmann, U. Vogel, H. Hoffschulz and K. Wandelt, Surface and electrochemical characterization of electrodeposited PtRu alloys 335 (1995) 361

X. Xia, L. Perera, U. Essmann and M.L. Berkowitz, The structure of water at platinum/water interfaces. Molecular dynamics computer simulations 335 (1995) 401

Rhodium

G.A. Attard, R. Price and A. Al-Akl, Electrochemical and ultrahigh vacuum characterisation of rhodium on Pt(111): a temperature dependent growth mode 335 (1995) 52

Ruthenium

J. Mink, J. Kristóf, A. De Battisti, S. Daolio and Cs. Németh, Investigation on the formation of RuO_2-based mixed oxide coatings by spectroscopic methods 335 (1995) 252

T. Frelink, W. Visscher and J.A.R. van Veen, On the role of Ru and Sn as promotors of methanol electro-oxidation over Pt 335 (1995) 353

F. Richarz, B. Wohlmann, U. Vogel, H. Hoffschulz and K. Wandelt, Surface and electrochemical characterization of electrodeposited PtRu alloys 335 (1995) 361

Silicon

J. Rappich, M. Aggour, S. Rauscher, H.J. Lewerenz and H. Jungblut, Electrochemical surface conditioning of n-Si(111) 335 (1995) 160

Silver

P. Mrozek, Y.-E. Sung and A. Wieckowski, Silver deposition on the Au(111) electrode without interference by specifically adsorbed anions 335 (1995) 44

N. Shinotsuka, K. Sashikata and K. Itaya, In situ scanning tunneling microscopy of underpotential deposition of Ag on Pt(111)($\sqrt{7} \times \sqrt{7}$)R19.1°–I 335 (1995) 75

E. Leiva, Electronic properties of a monolayer of thallium deposited on Ag(111) 335 (1995) 83

J. Hotlos, O.M. Magnussen and R.J. Behm, Effect of trace amounts of Cl^- in Cu underpotential deposition on Au(111) in perchlorate solutions: an in-situ scanning tunneling microscopy study 335 (1995) 129
V. Lazarescu, Adsorption of pyrazine on Au(111) and Ag(111): on the role of the electronic factor 335 (1995) 227
M.L. Foresti, G. Aloisi, M. Innocenti, H. Kobayashi and R. Guidelli, Crystal face effects on adsorption of ionic and non-ionic species on Ag electrodes: an electrochemical and STM study 335 (1995) 241
M.F. Toney, J.N. Howard, J. Richer, G.L. Borges, J.G. Gordon, O.R. Melroy, D.G. Wiesler, D. Yee and L.B. Sorensen, Distribution of water molecules at Ag(111)/electrolyte interface as studied with surface X-ray scattering 335 (1995) 326

Thallium

E. Leiva, Electronic properties of a monolayer of thallium deposited on Ag(111) 335 (1995) 83
J.X. Wang, R.R. Adzic, O.M. Magnussen and B.M. Ocko, Structure of electrodeposited Tl overlayers on Au(100) studied via surface X-ray scattering 335 (1995) 120

Tin

T. Frelink, W. Visscher and J.A.R. van Veen, On the role of Ru and Sn as promotors of methanol electro-oxidation over Pt 335 (1995) 353

Titanium

J. Mink, J. Kristóf, A. De Battisti, S. Daolio and Cs. Németh, Investigation on the formation of RuO_2-based mixed oxide coatings by spectroscopic methods 335 (1995) 252

Compounds (non-molecular solids)

Copper oxides

M. Šmith, V. Gotovac, Lj. Aljinović and M. Lučić-Lavčević, An investigation of the electrochemical and photoelectrochemical properties of the cuprous oxide/liquid phase boundary 335 (1995) 171

Ethine

V.M. Schmidt, J. Stumper, J. Schmidberger, E. Pastor and A. Hamelin, Structural effects on ethine adsorption at gold single-crystal electrodes 335 (1995) 197

Gallium arsenide

H. Yao, S.-L. Yau and K. Itaya, Atomic resolution images of GaAs(111)A surfaces in sulfuric acid solutions 335 (1995) 166

Hydrides

A. Tadjeddine, A. Peremans and P. Guyot-Sionnest, Vibrational spectroscopy of the electrochemical interface by visible-infrared sum-frequency generation 335 (1995) 210

Perchloric acid

E.M. Stuve, A. Krasnopoler and D.E. Sauer, Relating the in-situ, ex-situ, and non-situ environments in surface electrochemistry 335 (1995) 177

Sulfate ions

S. Mirwald, B. Pettinger and J. Lipkowski, Sulfate adsorption at Au(111) electrodes: an optical second harmonic generation study 335 (1995) 264

Tungsten selenide

W. Jaegermann and Th. Mayer, What do we learn from model experiments of semiconductor/electrolyte interfaces in UHV: coadsorption of Br_2 with Na and H_2O on WSe_2(0001) 335 (1995) 343

Molecules

Alcohols

T. Frelink, W. Visscher and J.A.R. van Veen, On the role of Ru and Sn as promotors of methanol electro-oxidation over Pt 335 (1995) 353

Alkenes

U. Müller, U. Schmiemann, A. Dülberg and H. Baltruschat, Adsorption and hydrogenation of simple alkenes at Pt-group metal electrodes studied by DEMS: influence of the crystal orientation 335 (1995) 333

Carbon dioxide

K. Videm, The influence of the state of the surface on the electrochemistry of iron and carbon steel electrodes in aqueous CO_2 solutions 335 (1995) 235
Y. Hori, H. Wakebe, T. Tsukamoto and O. Koga, Adsorption of CO accompanied with simultaneous charge transfer on copper single crystal electrodes related with electrochemical reduction of CO_2 to hydrocarbons 335 (1995) 258

Carbon monoxide

Y. Hori, H. Wakebe, T. Tsukamoto and O. Koga, Adsorption of CO accompanied with simultaneous charge transfer on copper single crystal electrodes related with electrochemical reduction of CO_2 to hydrocarbons 335 (1995) 258
I. Villegas, N. Kizhakevariam and M.J. Weaver, Infrared spectroscopy of model electrochemical interfaces in ultrahigh vacuum: some implications for ionic and chemisorbate solvation at electrode surfaces 335 (1995) 300
F. Richarz, B. Wohlmann, U. Vogel, H. Hoffschulz and K. Wandelt, Surface and electrochemical characterization of electrodeposited PtRu alloys 335 (1995) 361

Carboxylic acid

P. Baumann, G. Pirug, D. Reuter and H.P. Bonzel, UHV adsorption studies of K/H_2O on Pt(111) and O/CH_3COOH on Cu(110): orientation and intermediates 335 (1995) 186

Cyanide

C. Stuhlmann, Characterization of an electrode adlayer by in-situ infrared spectroscopy: cyanide on Pt(111) 335 (1995) 221
K.A. Friedrich, W. Daum, C. Klünker, D. Knabben, U. Stimming and H. Ibach, In-situ spectroscopy of cyanide vibrations on

Pt(111) and Pt(110) electrode surfaces: potential dependencies and the influence of surface disorder 335 (1995) 315

Halogens

W. Jaegermann and Th. Mayer, What do we learn from model experiments of semiconductor/electrolyte interfaces in UHV: coadsorption of Br_2 with Na and H_2O on WSe_2(0001) 335 (1995) 343

Hydrogen

A. Tadjeddine, A. Peremans and P. Guyot-Sionnest, Vibrational spectroscopy of the electrochemical interface by visible-infrared sum-frequency generation 335 (1995) 210

Pyrazine

V. Lazarescu, Adsorption of pyrazine on Au(111) and Ag(111): on the role of the electronic factor 335 (1995) 227

Uracil

M.H. Hölzle, Th. Wandlowski and D.M. Kolb, Structural transitions in uracil adlayers on gold single crystal electrodes 335 (1995) 281

Water

Y.-L. Mathis, K. Murakoshi, F. Bouamrane, P. Roy and A. Tadjeddine, Surface reconstruction of Au(100) electrodes monitored by far infrared spectroscopy 335 (1995) 155

E.M. Stuve, A. Krasnopoler and D.E. Sauer, Relating the in-situ, ex-situ, and non-situ environments in surface electrochemistry 335 (1995) 177

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J. Böcker, R.R. Nazmutdinov, E. Spohr and K. Heinzinger, Molecular dynamics simulation studies of the mercury–water interface 335 (1995) 372

X. Xia, L. Perera, U. Essmann and M.L. Berkowitz, The structure of water at platinum/water interfaces. Molecular dynamics computer simulations 335 (1995) 401

W. Schmickler, Tunneling of electrons through thin layers of water 335 (1995) 416

PHYSICAL STATE

Surfaces

Dendritic and/or fractile surfaces

A.J. Arvia and R.C. Salvarezza, From regular to irregular solid electrode surfaces: a systematic approach to their characterization 335 (1995) 378

Polycrystalline surfaces

A. Tadjeddine, A. Peremans and P. Guyot-Sionnest, Vibrational spectroscopy of the electrochemical interface by visible-infrared sum-frequency generation 335 (1995) 210

Single crystal surfaces

R. Gómez, H.S. Yee, G.M. Bommarito, J.M. Feliu and H.D. Abruña, Anion effects and the mechanism of Cu UPD on Pt(111): X-ray and electrochemical studies 335 (1995) 101

R.J. Nichols, E. Bunge, H. Meyer and H. Baumgärtel, Classification of growth behaviour for copper on various substrates with in-situ scanning probe microscopy 335 (1995) 110

J. Rappich, M. Aggour, S. Rauscher, H.J. Lewerenz and H. Jungblut, Electrochemical surface conditioning of n-Si(111) 335 (1995) 160

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Low index single crystal surfaces

Y. Shingaya, H. Matsumoto, H. Ogasawara and M. Ito, In situ and ex situ IRAS, LEED and EC-STM studies of underpotentially deposited copper on a Pt(111) electrode in sulfuric acid solution: coadsorption of sulfate ion with copper 335 (1995) 23

P. Mrozek, Y.-E. Sung and A. Wieckowski, Silver deposition on the Au(111) electrode without interference by specifically adsorbed anions 335 (1995) 44

N. Shinotsuka, K. Sashikata and K. Itaya, In situ scanning tunneling microscopy of underpotential deposition of Ag on Pt(111)($\sqrt{7} \times \sqrt{7}$)R19.1°–I 335 (1995) 75

N.M. Marković, H.A. Gasteiger, C.A. Lucaš, I.M. Tidswell and P.N. Ross, Jr., The effect of chloride on the underpotential deposition of copper on Pt(111): AES, LEED, RRDE, and X-ray scattering studies 335 (1995) 91

Y.-L. Mathis, K. Murakoshi, F. Bouamrane, P. Roy and A. Tadjeddine, Surface reconstruction of Au(100) electrodes monitored by far infrared spectroscopy 335 (1995) 155

H. Yao, S.-L. Yau and K. Itaya, Atomic resolution images of GaAs(111)A surfaces in sulfuric acid solutions 335 (1995) 166

V.M. Schmidt, J. Stumper, J. Schmidberger, E. Pastor and A. Hamelin, Structural effects on ethine adsorption at gold single-crystal electrodes 335 (1995) 197

T. Yamada, N. Batina and K. Itaya, Interfacial structure of iodine electrodeposited on Au(111): studies by LEED and in situ STM 335 (1995) 204

A. Tadjeddine, A. Peremans and P. Guyot-Sionnest, Vibrational spectroscopy of the electrochemical interface by visible-infrared sum-frequency generation 335 (1995) 210

C. Stuhlmann, Characterization of an electrode adlayer by in-situ infrared spectroscopy: cyanide on Pt(111) 335 (1995) 221

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M.L. Foresti, G. Aloisi, M. Innocenti, H. Kobayashi and R. Guidelli, Crystal face effects on adsorption of ionic and non-ionic species on Ag electrodes: an electrochemical and STM study 335 (1995) 241

Y. Hori, H. Wakebe, T. Tsukamoto and O. Koga, Adsorption of CO accompanied with simultaneous charge transfer on copper single crystal electrodes related with electrochemical reduction of CO_2 to hydrocarbons 335 (1995) 258
S. Mirwald, B. Pettinger and J. Lipkowski, Sulfate adsorption at Au(111) electrodes: an optical second harmonic generation study 335 (1995) 264
M.H. Hölzle, Th. Wandlowski and D.M. Kolb, Structural transitions in uracil adlayers on gold single crystal electrodes 335 (1995) 281
A.M. Bittner, J. Wintterlin, B. Beran and G. Ertl, Bromine adsorption on Pt(111), (100), and (110) – an STM study in air and in electrolyte 335 (1995) 291
M.F. Toney, J.N. Howard, J. Richer, G.L. Borges, J.G. Gordon, O.R. Melroy, D.G. Wiesler, D. Yee and L.B. Sorensen, Distribution of water molecules at Ag(111)/electrolyte interface as studied with surface X-ray scattering 335 (1995) 326
U. Müller, U. Schmiemann, A. Dülberg and H. Baltruschat, Adsorption and hydrogenation of simple alkenes at Pt-group metal electrodes studied by DEMS: influence of the crystal orientation 335 (1995) 333
P.A. Rikvold, M. Gamboa-Aldeco, J. Zhang, M. Han, Q. Wang, H.L. Richards and A. Wieckowski, Computational lattice-gas modeling of the electrosorption of small molecules and ions 335 (1995) 389

Surface defects

W.J. Lorenz and G. Staikov, 2D and 3D thin film formation and growth mechanisms in metal electrocrystallization – an atomistic view by in situ STM 335 (1995) 32
A.J. Arvia and R.C. Salvarezza, From regular to irregular solid electrode surfaces: a systematic approach to their characterization 335 (1995) 378

Interfaces

Solid–gas interfaces

G.A. Somorjai, Molecular level studies of solid–gas and solid-liquid interfaces 335 (1995) 10

Solid–liquid interfaces

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Y. Shingaya, H. Matsumoto, H. Ogasawara and M. Ito, In situ and ex situ IRAS, LEED and EC-STM studies of underpotentially deposited copper on a Pt(111) electrode in sulfuric acid solution: coadsorption of sulfate ion with copper 335 (1995) 23
W.J. Lorenz and G. Staikov, 2D and 3D thin film formation and growth mechanisms in metal electrocrystallization – an atomistic view by in situ STM 335 (1995) 32
P. Mrozek, Y.-E. Sung and A. Wieckowski, Silver deposition on the Au(111) electrode without interference by specifically adsorbed anions 335 (1995) 44
G.A. Attard, R. Price and A. Al-Akl, Electrochemical and ultrahigh vacuum characterisation of rhodium on Pt(111): a temperature dependent growth mode 335 (1995) 52
G.A. Attard and R. Price, Electrochemical iunvestigation of a structure sensitive growth mode: palladium deposition on Pt(100)-hex-R0.7° and Pt(100)-(1 × 1) 335 (1995) 63
N. Shinotsuka, K. Sashikata and K. Itaya, In situ scanning tunneling microscopy of underpotential deposition of Ag on Pt(111)($\sqrt{7} \times \sqrt{7}$)R19.1°–I 335 (1995) 75
N.M. Marković, H.A. Gasteiger, C.A. Lucas, I.M. Tidswell and P.N. Ross, Jr., The effect of chloride on the underpotential deposition of copper on Pt(111): AES, LEED, RRDE, and X-ray scattering studies 335 (1995) 91
R. Gómez, H.S. Yee, G.M. Bommarito, J.M. Feliu and H.D. Abruña, Anion effects and the mechanism of Cu UPD on Pt(111): X-ray and electrochemical studies 335 (1995) 101
R.J. Nichols, E. Bunge, H. Meyer and H. Baumgärtel, Classification of growth behaviour for copper on various substrates with in-situ scanning probe microscopy 335 (1995) 110
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H. Yao, S.-L. Yau and K. Itaya, Atomic resolution images of GaAs(111)A surfaces in sulfuric acid solutions 335 (1995) 166
E.M. Stuve, A. Krasnopoler and D.E. Sauer, Relating the in-situ, ex-situ, and non-situ environments in surface electrochemistry 335 (1995) 177
T. Yamada, N. Batina and K. Itaya, Interfacial structure of iodine electrodeposited on Au(111): studies by LEED and in situ STM 335 (1995) 204
A. Tadjeddine, A. Peremans and P. Guyot-Sionnest, Vibrational spectroscopy of the electrochemical interface by visible-infrared sum-frequency generation 335 (1995) 210
V. Lazarescu, Adsorption of pyrazine on Au(111) and Ag(111): on the role of the electronic factor 335 (1995) 227
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S. Mirwald, B. Pettinger and J. Lipkowski, Sulfate adsorption at Au(111) electrodes: an optical second harmonic generation study 335 (1995) 264
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M.F. Toney, J.N. Howard, J. Richer, G.L. Borges, J.G. Gordon, O.R. Melroy, D.G. Wiesler, D. Yee and L.B. Sorensen, Distribution of water molecules at Ag(111)/electrolyte interface as studied with surface X-ray scattering 335 (1995) 326
U. Müller, U. Schmiemann, A. Dülberg and H. Baltruschat, Adsorption and hydrogenation of simple alkenes at Pt-group metal electrodes studied by DEMS: influence of the crystal orientation 335 (1995) 333
F. Richarz, B. Wohlmann, U. Vogel, H. Hoffschulz and K. Wandelt, Surface and electrochemical characterization of electrodeposited PtRu alloys 335 (1995) 361
J. Böcker, R.R. Nazmutdinov, E. Spohr and K. Heinzinger, Molecular dynamics simulation studies of the mercury–water interface 335 (1995) 372

P.A. Rikvold, M. Gamboa-Aldeco, J. Zhang, M. Han, Q. Wang, H.L. Richards and A. Wieckowski, Computational lattice-gas modeling of the electrosorption of small molecules and ions 335 (1995) 389
X. Xia, L. Perera, U. Essmann and M.L. Berkowitz, The structure of water at platinum/water interfaces. Molecular dynamics computer simulations 335 (1995) 401
W. Schmickler, Tunneling of electrons through thin layers of water 335 (1995) 416
M.R. Philpott, J.N. Glosli and S.-B. Zhu, Molecular dynamics simulation of adsorption in electric double layers 335 (1995) 422

Heterostructures

Superlattices

W.J. Lorenz and G. Staikov, 2D and 3D thin film formation and growth mechanisms in metal electrocrystallization – an atomistic view by in situ STM 335 (1995) 32

Non-epitaxial thin film structures

Polycrystalline thin films

M. Šmith, V. Gotovac, Lj. Aljinović and M. Lučić-Lavčević, An investigation of the electrochemical and photoelectrochemical properties of the cuprous oxide/liquid phase boundary 335 (1995) 171

Adatoms

W.J. Lorenz and G. Staikov, 2D and 3D thin film formation and growth mechanisms in metal electrocrystallization – an atomistic view by in situ STM 335 (1995) 32
N.M. Marković, H.A. Gasteiger, C.A. Lucas, I.M. Tidswell and P.N. Ross, Jr., The effect of chloride on the underpotential deposition of copper on Pt(111): AES, LEED, RRDE, and X-ray scattering studies 335 (1995) 91

Clusters

W.J. Lorenz and G. Staikov, 2D and 3D thin film formation and growth mechanisms in metal electrocrystallization – an atomistic view by in situ STM 335 (1995) 32

Coatings

W.J. Lorenz and G. Staikov, 2D and 3D thin film formation and growth mechanisms in metal electrocrystallization – an atomistic view by in situ STM 335 (1995) 32

ELECTRICAL AND MAGNETIC BEHAVIOR

Surfaces and/or films

Metallic films

P. Mrozek, Y.-E. Sung and A. Wieckowski, Silver deposition on the Au(111) electrode without interference by specifically adsorbed anions 335 (1995) 44

Semiconducting films

M. Šmith, V. Gotovac, Lj. Aljinović and M. Lučić-Lavčević, An investigation of the electrochemical and photoelectrochemical properties of the cuprous oxide/liquid phase boundary 335 (1995) 171

Interfaces

Metal–electrolyte interfaces

Y. Shingaya, H. Matsumoto, H. Ogasawara and M. Ito, In situ and ex situ IRAS, LEED and EC-STM studies of underpotentially deposited copper on a Pt(111) electrode in sulfuric acid solution: coadsorption of sulfate ion with copper 335 (1995) 23
W.J. Lorenz and G. Staikov, 2D and 3D thin film formation and growth mechanisms in metal electrocrystallization – an atomistic view by in situ STM 335 (1995) 32
P. Mrozek, Y.-E. Sung and A. Wieckowski, Silver deposition on the Au(111) electrode without interference by specifically adsorbed anions 335 (1995) 44
N. Shinotsuka, K. Sashikata and K. Itaya, In situ scanning tunneling microscopy of underpotential deposition of Ag on Pt(111)($\sqrt{7} \times \sqrt{7}$)R19.1°–I 335 (1995) 75
N.M. Marković, H.A. Gasteiger, C.A. Lucas, I.M. Tidswell and P.N. Ross, Jr., The effect of chloride on the underpotential deposition of copper on Pt(111): AES, LEED, RRDE, and X-ray scattering studies 335 (1995) 91
Y.-L. Mathis, K. Murakoshi, F. Bouamrane, P. Roy and A. Tadjeddine, Surface reconstruction of Au(100) electrodes monitored by far infrared spectroscopy 335 (1995) 155
E.M. Stuve, A. Krasnopoler and D.E. Sauer, Relating the in-situ, ex-situ, and non-situ environments in surface electrochemistry 335 (1995) 177
V.M. Schmidt, J. Stumper, J. Schmidberger, E. Pastor and A. Hamelin, Structural effects on ethine adsorption at gold single-crystal electrodes 335 (1995) 197
T. Yamada, N. Batina and K. Itaya, Interfacial structure of iodine electrodeposited on Au(111): studies by LEED and in situ STM 335 (1995) 204
A. Tadjeddine, A. Peremans and P. Guyot-Sionnest, Vibrational spectroscopy of the electrochemical interface by visible-infrared sum-frequency generation 335 (1995) 210
C. Stuhlmann, Characterization of an electrode adlayer by in-situ infrared spectroscopy: cyanide on Pt(111) 335 (1995) 221
Y. Hori, H. Wakebe, T. Tsukamoto and O. Koga, Adsorption of CO accompanied with simultaneous charge transfer on copper single crystal electrodes related with electrochemical reduction of CO_2 to hydrocarbons 335 (1995) 258
S. Mirwald, B. Pettinger and J. Lipkowski, Sulfate adsorption at Au(111) electrodes: an optical second harmonic generation study 335 (1995) 264
A.M. Bittner, J. Wintterlin, B. Beran and G. Ertl, Bromine adsorption on Pt(111), (100), and (110) – an STM study in air and in electrolyte 335 (1995) 291
K.A. Friedrich, W. Daum, C. Klünker, D. Knabben, U. Stimming and H. Ibach, In-situ spectroscopy of cyanide vibrations on

Pt(111) and Pt(110) electrode surfaces: potential dependencies and the influence of surface disorder 335 (1995) 315

M.F. Toney, J.N. Howard, J. Richer, G.L. Borges, J.G. Gordon, O.R. Melroy, D.G. Wiesler, D. Yee and L.B. Sorensen, Distribution of water molecules at Ag(111)/electrolyte interface as studied with surface X-ray scattering 335 (1995) 326

J. Böcker, R.R. Nazmutdinov, E. Spohr and K. Heinzinger, Molecular dynamics simulation studies of the mercury–water interface 335 (1995) 372

W. Schmickler, Tunneling of electrons through thin layers of water 335 (1995) 416

M.R. Philpott, J.N. Glosli and S.-B. Zhu, Molecular dynamics simulation of adsorption in electric double layers 335 (1995) 422

Metal–metal interfaces

R. Gómez, H.S. Yee, G.M. Bommarito, J.M. Feliu and H.D. Abruña, Anion effects and the mechanism of Cu UPD on Pt(111): X-ray and electrochemical studies 335 (1995) 101

Metal / water

X. Xia, L. Perera, U. Essmann and M.L. Berkowitz, The structure of water at platinum/water interfaces. Molecular dynamics computer simulations 335 (1995) 401

Semiconductor–electrolyte interfaces

J. Rappich, M. Aggour, S. Rauscher, H.J. Lewerenz and H. Jungblut, Electrochemical surface conditioning of n-Si(111) 335 (1995) 160

H. Yao, S.-L. Yau and K. Itaya, Atomic resolution images of GaAs(111)A surfaces in sulfuric acid solutions 335 (1995) 166

M. Šmith, V. Gotovac, Lj. Aljinović and M. Lučić-Lavčević, An investigation of the electrochemical and photoelectrochemical properties of the cuprous oxide/liquid phase boundary 335 (1995) 171

W. Jaegermann and Th. Mayer, What do we learn from model experiments of semiconductor/electrolyte interfaces in UHV: coadsorption of Br_2 with Na and H_2O on WSe_2(0001) 335 (1995) 343

Heterostructures and thin film structures

Electrocatalytic

J. Mink, J. Kristóf, A. De Battisti, S. Daolio and Cs. Németh, Investigation on the formation of RuO_2-based mixed oxide coatings by spectroscopic methods 335 (1995) 252

Metal–metal nonmagnetic heterostructures

W.J. Lorenz and G. Staikov, 2D and 3D thin film formation and growth mechanisms in metal electrocrystallization – an atomistic view by in situ STM 335 (1995) 32

Metal–metal nonmagnetic thin film structures

W.J. Lorenz and G. Staikov, 2D and 3D thin film formation and growth mechanisms in metal electrocrystallization – an atomistic view by in situ STM 335 (1995) 32

Mixed oxide

J. Mink, J. Kristóf, A. De Battisti, S. Daolio and Cs. Németh, Investigation on the formation of RuO_2-based mixed oxide coatings by spectroscopic methods 335 (1995) 252